

What Is Claimed Is:

1. A dosing device (1) for liquid fuels, in particular for input into a chemical reformer in order to recover hydrogen, or into a secondary combustion device in order to generate heat, comprising at least one metering device (2) for metering fuel into a metering conduit (8) and having a nozzle body (7), adjoining the metering conduit (8), that has at least one spray discharge opening (14) which opens into a metering chamber, wherein the nozzle body (7) has a downstream support element (15) with a swirl insert (24), disposed on the spray-discharge side, in which the at least one spray discharge opening (14) is disposed.

2. The dosing device as recited in Claim 1, wherein the nozzle body (7) has, upstream from the support element (15), a tubular, in particular cylindrically tubular, supply tube (17) that is welded, in particular laser-welded, downstream in hydraulically sealed fashion to the tubular, in particular cylindrically tubular, support element (15).

3. The dosing device as recited in Claim 1 or 2, wherein the swirl insert (16) is joined in hydraulically sealed fashion to the support element (15), in particular by pressing or welding, in particular laser welding.

4. The dosing device as recited in one of Claims 1 through 3, wherein the swirl insert (24) has at least one seat element (4) having the at least one spray discharge opening (14), and a swirl element (16) disposed upstream from the seat element (4).

5. The dosing device as recited in Claim 4, wherein the swirl element (16) is disk-shaped.

6. The dosing device as recited in Claim 4 or 5, wherein the swirl element (16) has a continuous opening (25).

7. The dosing device as recited in one of Claims 6, wherein the opening (25) is at least partly closed off by an insert (28).

8. The dosing device as recited in Claim 7, wherein the insert (28) is connected to the swirl element (16) by welding, in particular laser welding.

9. The dosing device as recited in one of Claims 6 through 8, wherein the opening (25) has a longitudinal opening axis (26) that has a directional component pointing in the flow direction.

10. The dosing device as recited in Claim 9, wherein the swirl element (16) has at least one swirl conduit (12) that has directional components lying radially and tangentially to the longitudinal opening axis (26).

11. The dosing device as recited in one of Claims 4 through 10, wherein the swirl element (16) is joined to the seat element (4) by welding, in particular laser welding.

12. The dosing device as recited in one of Claims 4 through 11, wherein an intermediate element (22) is disposed between the swirl element (16) and seat element (4).

13. The dosing device as recited in one of Claims 4 through 12, wherein the swirl element (16) is spaced away from the wall of the support element (15) by a distance (27).

14. The dosing device as recited in one of the preceding claims, wherein the metering conduit (8) and the metering device (2) are joined in hydraulically sealed and detachable fashion by way of an adapter (6).

15. The dosing device as recited in Claim 14, wherein the adapter (6) has an air inlet (9) that is connected in the adapter (6) to the metering conduit (8).

16. The dosing device as recited in one of the preceding claims, wherein the metering device (2) is a fuel injection valve.

17. The dosing device as recited in one of the preceding claims, wherein the fuel injection valve is a low-pressure fuel injection valve that operates at fuel pressures of up to 10 bar.

18. The dosing device as recited in one of the preceding claims, wherein the metering conduit (8) has in its axial extent at least one reduced-wall-thickness point or one reduced-wall-thickness region.